

CITY COUNCIL AGENDA MEMORANDUM

SUBJECT

Resolution No. 8467, authorizing execution of a professional services agreement for AC Water Main Replacement Design Services (2013) - Phases 1 and 2, with Roth Hill, LLC for engineering services, in an amount not to exceed \$380,000 (CIP Plan No. W-16).

FISCAL IMPACT

Awarding this contract commits the City to a contract amount of \$380,000. This contract will be funded from the Utilities CIP Plan No. W-16, Small Diameter Water Main Replacement. This work was included in the 2011-2017 Utility CIP budget and there is adequate budget remaining to fund this contract.

STAFF CONTACT

Nav Ota, Director, 452-2041
Wes Jorgenson, Assistant Director, 452-4887
Utilities Department

POLICY CONSIDERATION

Utilities Department policies:

- To invest resources as necessary to construct, maintain and renew water system infrastructure and equipment so that Utility customers are provided with consistent, reliable service.

Utilities Department practice:

- Replace small diameter asbestos cement water main installed in the late 1940's and 1950's to reduce the possibility of water main breaks as well as to increase fire flow. CIP Plan No. W-16 has been designated to do this.

BACKGROUND

The Small Diameter Water Main Replacement (W-16) program has been ongoing for a number of years. Replacement of deteriorated elements of the water system will reduce the possibility of pipeline failure that may result in property damage and potential claims against the City and is consistent with the Utilities asset management program.

This contract will design the replacement of approximately 13,000 linear-feet of aging and undersized water main pipe throughout the Utilities service area. In order to attract interest from both large and smaller-sized construction firms and obtain the best possible price for these

improvements, the consultant will design two separate water main replacement projects, each approximately 6,500 linear-feet in length. Project sites being replaced are some of the oldest in our water service system or have a history of maintenance problems.

Utilities will be coordinating with the City's Transportation Department and neighborhood residents to complete the utility work prior to any pavement overlay and in order to minimize street restoration costs and construction inconvenience to neighborhoods. The total estimated construction cost for the pipeline replacement projects is approximately \$3 million.

Roth Hill, LLC has been selected to perform all design work for these projects. Due to limited in-house staff resources, Utilities relies on consultants to accomplish most design and engineering services for the CIP.

The consultant selection process for this contract was consistent with the City's policies and procedures. A selection team representing engineering design and operations staff participated in all aspects of the consultant selection. The selection team reviewed a pool of consultants from the City's consultant roster, and invited eight consulting firms to submit Statements of Qualifications (SOQ's). Five of these firms submitted SOQ's. The selection team reviewed the SOQ's submitted by Roth Hill, LLC, Blueline, CHS Engineers, SDA Engineers and Parsons Brinckerhoff. They selected Roth Hill, LLC as the most qualified firm because of their technical skills, knowledge, and expertise in water main design, which made them the most qualified to accomplish this work and meet project schedule requirements.

As required by state law relating to contracts for architectural and engineering services, the City selects the consultant deemed to be most highly qualified for a given project. State law precludes using cost as a basis for selection of engineering firms.

EFFECTIVE DATE

If adopted, this Resolution will become effective immediately.

OPTIONS

1. Adopt Resolution No. 8467, authorizing execution of a professional services agreement for AC Water Main Replacement Design Services (2013) - Phases 1 and 2, with Roth Hill, LLC for engineering services, in an amount not to exceed \$380,000 (CIP Plan No. W-16).
2. Do not adopt the Resolution and provide alternative direction to staff.

RECOMMENDATION

Adopt Resolution No. 8467, authorizing execution of a professional services agreement for AC Water Main Replacement Design Services (2013) - Phases 1 and 2, with Roth Hill, LLC for engineering services, in an amount not to exceed \$380,000 (CIP Plan No. W-16).

MOTION

Move to adopt Resolution No. 8467, authorizing execution of a professional services agreement for AC Water Main Replacement Design Services (2013) - Phases 1 and 2, with Roth Hill, LLC for engineering services, in an amount not to exceed \$380,000 (CIP Plan No. W-16).

ATTACHMENTS

CIP Project Description
Proposed Resolution No. 8467

AVAILABLE IN COUNCIL OFFICE

Consultant Contract

W-16 Small Diameter Water Main ReplacementCategory: Water
Department: UtilitiesStatus: Ongoing
Location: Various locations throughout Water Utility's service area

Programmed Funding

Programmed Funding	Appropriated To Date	FY 2011 Budget	FY 2012 Budget	FY 2013 Budget	FY 2014 Budget	FY 2015 Budget	FY 2016 Budget	FY 2017 Budget
71,729,354	28,114,000	3,980,080	4,645,472	5,359,024	6,124,427	6,942,490	7,815,758	8,748,103

Description and Scope

This program focuses primarily on replacing short-lived small diameter asbestos cement (AC) pipe, which yields a secondary benefit of increasing the emergency fireflow available to neighborhoods. This investment will ramp up water pipeline replacement to 5 miles/year by 2018, and then be adjusted with inflation to maintain the 5 miles/yr replacement rate. At that rate, water pipe will need to last on average 100-125 years. Pipes are selected for replacement based on risk of failure (likelihood and consequence), failure history, and coordination with other construction, such as planned street overlays (which reduce restoration costs).

PROJECT NEED: System Renewal and Replacement; Improved Level of Service

Rationale

Water pipeline replacement will ramp up from 1.5 miles per year to 5 miles per year over a year-year period. Acceleration of this project is required to achieve the Asset Management Program (AMP) goal of cost effective system renewal and replacement while maintaining acceptable customer service levels. Experience has shown that small diameter AC pipes have the shortest life. AC pipe fails catastrophically, often causing significant damage to nearby properties and triggering more breaks in nearby AC pipes. Before the program acceleration (initiated in 2009), the replacement rate meant water mains would need to last 400 years, well beyond expected asset life.

4-inch AC pipe comprises 3% of the water system, but accounts for one third of all main breaks. Besides size and material, soil corrosiveness, moisture content, and original construction quality affect pipe life. As budgeted, most 4-inch AC pipe will be replaced by 2017, reaching a maximum pipe age of 61 years. Replacement of 6-inch AC main would follow, over a 30 year period. Larger diameter mains would be replaced before they reach 125 years old. Pipes of other materials (ductile and cast iron, clay) will also be replaced as needed. The potential for main breaks will be significantly reduced, minimizing service disruptions to customers and costly emergency repairs, and reducing claims exposure.

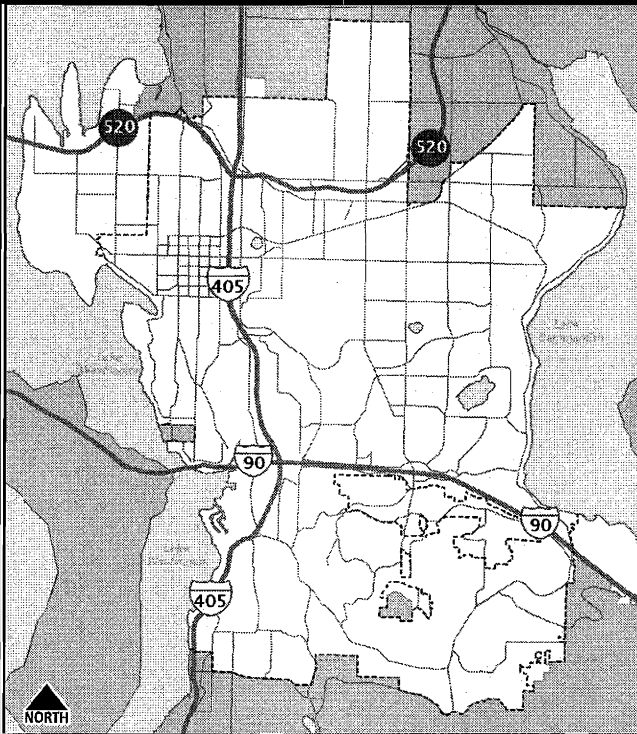
Environmental Impacts

Replacement of Water mains less than eight inches in diameter are generally exempt from environmental review, unless they are in or adjacent to sensitive areas. The status of environmental review of specific projects is undetermined.

Operating Budget Impacts

This project will have no impact on operating revenues (and/or) expenditures, since it replaces existing facilities.

Project Map



This project is located throughout the service area.

Schedule of Activities

Project Activities	From - To	Amount
Project Costs	Ongoing	71,729,354
Total Budgetary Cost Estimate:		71,729,354

Means of Financing

Funding Source	Amount
Charges for Services	15,000
Contributions from Other City Funds	179,000
Miscellaneous Revenue	794,000
Utility Rates/Fees	70,741,354
Total Programmed Funding:	71,729,354
Future Funding Requirements:	0

CITY OF BELLEVUE, WASHINGTON

RESOLUTION NO. 8467

A RESOLUTION authorizing the execution of a professional services agreement with Roth Hill, LLC, in an amount not to exceed \$380,000 (CIP Plan No. W-16) for engineering services for AC Water Main Replacement Design Services (2013) – Phases 1 and 2.

THE CITY COUNCIL OF THE CITY OF BELLEVUE, WASHINGTON, DOES RESOLVE AS FOLLOWS:

Section 1. The City Manager or his designee is hereby authorized to execute a professional services agreement with Roth Hill, LLC, in an amount not to exceed \$380,000 (CIP Plan No. W-16), for engineering services for AC Water Main Replacement Design Services (2013) – Phases 1 and 2, a copy of which agreement has been given Clerk's Receiving No. _____.

Passed by the City Council this _____ day of _____, 2012, and signed in authentication of its passage this _____ day of _____, 2012.

(SEAL)

Conrad Lee, Mayor

Attest:

Myrna L. Basich, City Clerk